2, That the inconveniences of employing shallow vessels in distilling wines, arise from the facility, with which evaporation takes place in them.

3, That a high temperature is always necessary to carry over the peculiar aroma of the wine, and perhaps too that arising from the action of heat in the principles of the wine.

4, That deep alembics ought to be preferred to shallow ones for the distillation of wine.

5, Lastly that the best dimensions of an alembic (for wine) with regard to figure, must be such, that the surface of the liquor heated shall be constantly greater than that from which the evaporation takes place, and we may for instance take it as a rule that the proportion between the two should be as four to one.

Remarks....The translator of the above paper for Nicholson's journal, observes that "though deep stills are best for distilling those simple or spirituous waters, where a full impregnation with the peculiar flavour of the vegetable substance employed is desirable; yet that from the above paper it is evident that a shallow still is preferable where the object is to prevent as much as possible the peculiar flavour of the liquor distilled from rising, as in distilling from malt and from molosses, the common materials in our country, and this not only on account of the saving in time and fuel, but of the superiority in point of flavour. The proper proportions for the deep stills for the finer kinds of the first mentioned articles, may deserve a more particular inquiry."

Mr. Curaudau has not been very happy in accounting for the greater heat, which the liquor in deep stills, is capable of acquiring, as by way of a cause he has merely stated an effect; the real cause is the greater pressure, which the increased depth of the liquor occasioned, affording more resistance to the motion of the heat, or hot steam, in its passage from the bottom of the alembic to the surface.

Account of a New Musical Instrument, called a Clavo-cylinder, invented by M. Chladni.

M. Chladni describes his invention in the following terms;

"The Clavi-cylinder contains a set of keys, and behind them a glass cylinder, seven centimeters (about three inches) in diameter, which is turned by means of a pedal, and loaded wheel. This cylinder is not the sounding body, but it produces the sound by friction on the interior mechanism. The sounds may be prolonged at pleasure, with all the gradations of *crescendo*, and *diminuendo*, in proportion as the pressure on the keys is increased or diminished. This instrument is never out of tune. It contains four octaves and an half, from *ut*, the lowest in the harpsichord, up to *fa*."

The imperial conservatory of music at Paris, have made a very favourable report of M. Chladni's invention, which report describes it as resembling the flute and clarionet in the high notes, and the bassoon in the low notes; but also states that it is not so well adapted for lively strains, as for solemn music. They however, highly praise its effects in the *crescendo* and *diminuendo*.

Remarks....Our late ingenious countryman, Mr. Clagget of Waterford, contrived and made several duplicates of an instrument, which possessed most of the properties of M. Chladni's Clavi-cylinder. It was called an *Aiauton*, and it consisted of tuning forks of various sizes, suitable to the different notes, over which a rozined silk band was moved by a crank and pedal, and was brought into contact with any one desired, by pressing the corresponding key. It seems very probable, from the effects of M. Chladni's instrument, corresponding so exactly with those of this, that the sounding parts are the same in both, and that they only differ in the glass cylinder in the French instrument being substituted for the silk band, of that contrived first by Mr Clagget.

On deal Pendulum Rods, by Mr. E. Walker. *Phil. Mag. v. 34, p. 2.*

Mr. Walker, in the beginning of